

### **REMARKS**

By the present Amendment, minor typographical revisions have been made throughout the specification and in two claims and the claims have been amended to define certain aspects of the present invention with greater precision. More specifically, claim 1 has been amended to recite that the fluoroalkyl(meth)acrylate represented by formula (I) has a  $R_2$  group that is an optionally substituted alkyl group having 1 to 12 carbon atoms and further that  $n$  is 4. This specific type of fluoroalkyl(meth)acrylate is supported by the original claims and the specification which states on page 12, lines 23-25 that a particularly preferred aspect of the invention is when  $n$  is 4 so as to provide good resolution, printing durability, ink-receptivity of image areas and developing property. Furthermore, the Table on page 77 provides specific embodiments of the present invention as Compounds (a), (b) and (c) which provide a copolymer with the illustrated repeating units. Such embodiments can provide superior properties relative not only to the copolymers obtained from Comparative Compounds (g) and (h), which have  $n=8$ , but also with respect to copolymers obtained from Compounds (d) and (f) wherein  $n$  is 3 and 2, respectively. The copolymers illustrated in the Table on page 77 are incorporated into various light-sensitive materials as provided in Table 2 on page 80 and the results therefrom are described in Table 3 on page 81 which illustrates that good ink receptivity and superior printing durability can be obtained in accordance with the presently claimed invention relative to the other light-sensitive materials which do not include a copolymer prepared from a compound within formula (I) as currently defined.

With the foregoing background in mind, it will be apparent to those of ordinary skill in the art that the cited prior art, namely Nishioka et al., U.S. Patent No.

4,822,713, and Adachi et al., U.S. Patent No. 5,279,922, do not disclose or suggest the presently claimed invention. Nishioka et al. relates to a light-sensitive composition for use in making a light-sensitive layer such as for a presensitized plate for lithographic printing. The composition comprises a fluorine-containing surfactant which is a copolymer of (i) an acrylate or methacrylate having a fluoroaliphatic group (Rf) which has 3 to 20 carbon atoms and at least 40% by weight of fluorine atoms and at least 3 terminal carbon atoms of which are fully fluorinated and (ii) a polyoxyalkylene(meth)acrylate. The Rf group is described in greater detail in the passage beginning at column 7, line 18 and in the sentence beginning on line 28, it is stated that in order to have a sufficient intended affect, the Rf group should have 3 to 20 carbon atoms, preferably 6 to 12 carbon atoms. Illustrative fluorine-containing surfactants have 8 carbon atoms (see Table 1 and Examples 20 and 21) and 6 carbon atoms (see Example 19 which the Examiner has characterized as being the closest prior art on page 4 of the Action).

Adachi et al. relates to a light-sensitive coating liquid comprising a defined organic solvent and which preferably also contains fluorine surfactants, such as (meth)acrylate polymers having fluorinated alkyl group in a side chain. Specific illustrations of such compounds are set forth in Formulas (IV) and (V) at the top of column 4. Of these compounds, the Examiner has specifically cited certain compounds in columns 7 and 9 of the patent.

It should be evident from the discussion provided above and a specific comparison with the amended claims and the teachings of Nishioka et al. and Adachi et al. that the presently claimed invention is outside the fair teachings of the cited patents. Neither of the patents in any way teaches the claimed light-sensitive layer containing a fluoro-aliphatic group-containing copolymer which includes a

fluoroalkyl(meth)acrylate represented by formula (I) wherein  $R^2$  is an optionally substituted alkyl group having 1 to 12 carbon atoms and having 4 methylene difluoride groups (i.e.,  $n=4$ ) with the last group having an additional fluoride. Instead, Nishioka et al. would lead those of ordinary skill in the art away from the present invention by specifically disclosing in column 7 that the number of  $R_f$  groups preferably has 6 to 12 carbon atoms ( $n=6-12$ ) and illustrating compounds having 6 and 8 carbon atoms.

Adachi et al. is even further afield for failing to teach the defined fluoroalkyl(meth)acrylate wherein  $n=4$  and wherein  $R^2$  is an optionally substituted alkyl group having 1 to 12 carbon atoms. In this latter respect, it will be appreciated from Formula (V) in column 4 of the patent and the corresponding specific embodiments that the patent only discloses a hydrogen atom attached to the nitrogen atom and not the claimed alkyl group.

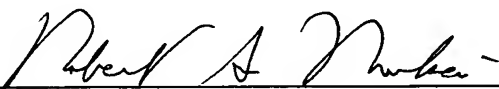
Although applicants believe that neither Nishioka et al. nor Adachi et al. establishes a *prima facie* case of obviousness with respect to the invention as defined in the claims of record, provided herewith is a Declaration under 37 C.F.R. § 1.132 which provides a direct comparison of an embodiment of the present invention with the closest aspects of the cited patents. In particular, Comparative Compound (i) is compound V-8 in Adachi et al. and Comparative Compound (j) is the compound used in Example 19 of Nishioka et al. with the repeating units of the obtained copolymers being illustrated. As demonstrated in Table 3', the light-sensitive layer of the presensitized plate in accordance with the present invention can provide a lithographic printing plate which is excellent in uniformity as well as ink-receptivity and printing durability. In contrast, the light-sensitive layers comprising comparative

polymers (i) and (j) show lower uniformity, ink-receptivity and printing durability. Moreover, Table 4' on the same page further shows that the present invention can provide improved contrast without any reduction of sensitivity and development latitude whereas the printing plates using polymers (i) and (j) show deteriorated contrast, sensitivity and development latitude. The results in Table 5' further demonstrate the superior results which can be obtained in accordance with the present invention. Thus, when the invention as defined in the claims of record is compared with the teachings of the cited prior art, particularly in light of the technical evidence of record, it should be clear to those of ordinary skill in the art that the presently claimed invention is patentable in all respects and applicants respectfully request reconsideration and allowance of the present application.

Should the Examiner have any questions concerning the subject application, the Examiner is invited to contact the undersigned attorney at the number provided below.

Respectfully submitted,

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